

REMARKS

Claims 1-4, 6-25, and 32-37 are pending in the application and have been examined. Claims 1-4, 6-11, 18-21, and 32-37 stand rejected. Claims 12-17 and 22-25 have been withdrawn from consideration. Claims 1-4, 7-15, 17- 20, 22, 25, 32-34, 36, and 37 have been amended. Claims 37-43 have been added. Reconsideration of Claims 1-4, 6-11, 18-21, and 32-37, and allowance of Claims 1-4, 6-25, 32-37, and 37-43 in view of the following remarks is respectfully requested.

Interview Summary

Applicant and applicant's attorney thank the Examiner for granting a telephonic interview on November 21, 2006, and for her helpful comments and suggestions during the interview. The participants in the interview were Examiner Lori A. Clow, Supervisory Examiner Marjorie Moran, the applicant and inventor Dr. Erik Gunther, and applicant's attorney Tineka J. Quinton. During the interview, proposed claim amendments were discussed that would remove the rejection based on 35 U.S.C. § 112. In particular with regard to Claim 1, the Examiners suggested proposed amendments to further clarify step (d) of Claim 1. Proposed amendments to clarify several dependent claims were also discussed. With regard to Claim 1, steps b and c, the term "second biological sample" was discussed, and the applicant and the Examiners concurred that the scope of Claim 1(c) was not limited to performing an assay on the identical second biological sample of Claim 1(b), but refers also to performing an assay on a third sample of similar type to the second sample of Claim 1(b) to obtain a third expression profile of the set of molecules in the second biological sample type after treatment of the second biological sample type with at least one analyte.

The Rejection of Claims 1-4, 6-11, 18-21, and 32-37 Under 35 U.S.C. § 112, Second Paragraph

Claims 1-4, 6-11, 18-21, and 32-37 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention. During the Examiner interview described above, the Examiners have suggested claim language that would help to clarify the invention. Accordingly, the following amendments have been made to clarify the claimed invention.

Claim 1, step (c), has been amended to replace the term "therapeutic" with the term "pharmacological." Support for this amendment can be found throughout the specification, for example, at page 3, line 28, to page 4, line 13; page 5, lines 23-25; and page 9, lines 9-12.

Claim 1, step (d), has been amended to recite "wherein the analytes identified as inducing a third expression profile that is more similar to the first expression profile than is a second expression profile is indicative of the identified analytes possessing pharmacological activity." Support for this amendment can be found throughout the specification, for example, at page 8, line 23, to page 10, line 10.

Claim 2, step (c), has been amended to correct antecedent basis and now recites "comparing the first difference profile with the second difference profile to identify the one or more analytes."

Claims 3 and 33 have been amended to recite "wherein identification comprises classifying all the expression profiles using neural network computing." Support for this amendment is found throughout the specification, for example, at page 10, line 11, to page 11, line 10.

Claims 4, 9, 11, 18, 34, and 36 have been amended to remove the term "is determined" and to replace it with the phrase "wherein any of the steps used to perform at least one of the assays comprises" as suggested by the Examiner, in order to clarify the claimed invention.

Claim 7 has been amended to recite "wherein at least one biological sample is derived from a sample that exhibits a disease condition." Support for this amendment is found throughout the specification, for example, at page 3, line 1, to page 4, line 5; and page 12, lines 1-10.

Claim 10 has been amended to recite "wherein the polynucleic acid microarrays comprise elements capable of differentially binding specific peptides." Support for this amendment is found throughout the specification, for example, at page 7, lines 3-17.

Claims 19 and 37 have been amended to recite "wherein step (c) is conducted many times in high-throughput fashion with distinct analytes from a library of analytes." Support for this amendment is found at page 4, lines 7-13.

Claim 20 has been amended to delete the phrase "or sources of data."

Claim 32, step (b), has been amended to recite "wherein the second biological sample differs from the first biological sample by exposure to a drug treatment." Support for this amendment is found at page 12, lines 11-23.

It is submitted that Claims 1-4, 6-11, 18-21, and 32-37, as amended, meet the statutory requirement under 35 U.S.C. § 112, second paragraph, and removal of this ground of rejection is respectfully requested.

New Claims 38-43

Claims 38-43 have been added. Claims 38-43 each depend from Claim 1 and are each directed to subject matter included in a Markush group of Claim 8. No new matter has been added.

CONCLUSION

In view of the foregoing remarks, it is submitted that Claims 1-4, 6-25, 32-37, and 37-43 are in condition for allowance. If the Examiner has any further questions that may be expeditiously resolved with a telephone call, the Examiner is invited to contact the applicant's attorney at the number provided below.

Respectfully submitted,

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